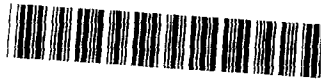


03-12-2002

IBM Ref. No.: SJO920010055US1
Altera Ref. No.: 501.393US01

102014635

Form PTO 1595

Recordation Form Cover Sheet

U.S. Department of Commerce

PATENTS ONLY

Patent and Trademark Office

MRD 2-25-02

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof

1. Name of conveying party(ies)

Brian Dennis McKean
Randall Alan Pare

2. Name and address of receiving party(ies):

International Business Machines Corporation
New Orchard Road
Armonk, New York 10504jc997 U.S. PTO
10/084404
02/25/02Additional names(s) of conveying party(ies) ☐ Yes ☒ NoAdditional name(s) & addresses attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: February 11, 2002

10084404

4. Application number(s) or patent number(s)

If this document is being filed together with a new application, the execution date of the application is: February 11, 2002

A. Patent Application Number(s)

Patent Number(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name David W. Lynch
Address: Altera Law Group
6500 City West Parkway - Suite 100
Minneapolis, Minnesota 55344-7701

6. Total number of applications and patents involved: One

7. Total fee (37 C.F.R. §3.41) \$40.00

- ☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account
☐ Authorized to charged to deposit account

8. Deposit Account number: 50-1038

03/11/2002 DBYRNE 00000184 10084404

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9. Statement and Signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David W. Lynch
Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: Two

PATENT
REEL: 012650 FRAME: 0169

PATENT ASSIGNMENT TO CORPORATION WORLDWIDE

WHEREAS,

1. Brian Dennis McKean residing at 1693 Brown Court, Longmont, Colorado 80503 and a citizen of USA;
2. Randall Alan Pare residing at 2673 Beech Circle, Longmont, Colorado 80503 and a citizen of USA;
3. residing at and a citizen of ;

hereafter referred to as "THE UNDERSIGNED", have made an invention entitled: METHOD AND APPARATUS FOR USING CACHE COHERENCY LOCKING TO FACILITATE ON-LINE VOLUME EXPANSION IN A MULTI-CONTROLLER STORAGE SYSTEM;

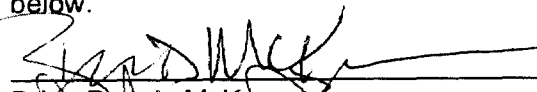
AND, WHEREAS, INTERNATIONAL BUSINESS MACHINES CORPORATION, hereafter referred to as ASSIGNEE, a corporation organized under the laws of the state of New York and whose place of business is New Orchard Road, Armonk, New York 10504, is desirous of acquiring the entire right, title and interest in the same;

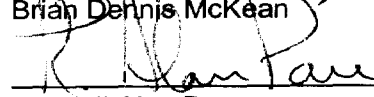
NOW, THEREFORE in consideration of the sum of One Dollar, the receipt whereof is acknowledged, and other good and valuable consideration, THE UNDERSIGNED hereby sell, assign and transfer unto ASSIGNEE the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to all divisionals, continuations, continuations in part, reissues, reexaminations or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extension of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said invention including an assignment of all rights under the provision of international conventions and all Letters Patent of foreign countries which may be granted therefrom; the UNDERSIGNED hereby authorize the Commissioner of Patents to issue any and all United States Letters Patent for the aforesaid invention to ASSIGNEE of the entire right, title and interest in and to the same, for the use of the ASSIGNEE, its successors and assigns.

THE UNDERSIGNED, hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts Known to THE UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, its successors or assigns the entire right, title and interest in and to the said invention, applications, Letters Patent, rights, titles and benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

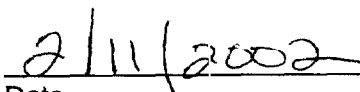
THE UNDERSIGNED represent and agree with said Assignee its successors and assignees, that no assignment grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by THE UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by THE UNDERSIGNED.

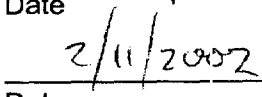
IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below.



Brian Dennis McKean


Randall Alan Pare



Date


Date

No Legalization Required

RECORDED: 02/25/2002

PATENT
REEL: 012650 FRAME: 0170